

From: Gerald Heston/R3/USEPA/US
Sent: 2/2/2012 8:06:05 AM
To: Richard Fetzner/R3/USEPA/US@EPA
CC:
Subject: Fw: USGS article cited in news article

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----- Forwarded by Gerald Heston/R3/USEPA/US on 02/02/2012 08:05 AM -----

From: KarenD Johnson/R3/USEPA/US
To: Gerald Heston/R3/USEPA/US@EPA, Dennis Carney/R3/USEPA/US@EPA
Cc: Eric Johnson/R3/USEPA/US@EPA
Date: 02/02/2012 07:38 AM
Subject: Re: USGS article cited in news article

FYI- the supporting info for what i told you last night:

I went through the document last night "Groundwater Resources of the Upper Susquehanna River Basin, Pennsylvania - Water Resources report 58: 1984" and there are 5 wells included from the Carter Road/Meshopen Creek area they are all identified to be into the aquifer: "Dck" the Catskill formation, and there are over 70 wells in Susquehanna county that were sampled, including one of the 5 in this specific area.

Wells included in the area are: Su- 81 owned by **Ex. 6 - Personal Privacy** drilled in 1979 depth 148" and 138 ' of surface casing, pH was 7.4

Su-95 owned by **Ex. 6 - Personal Privacy** 1 drilled in 1980 depth 165' and 140' of surface casing

Su-96 owned by **Ex. 6 - Personal Privacy** drilled 1977 depth 250' with 200 feet of surface casing

Su- 110 owned by **Ex. 6 - Personal Privacy** drilled in 1979, depth 242' with 42' surface casing

Su-116 owned by **Ex. 6 - Personal Privacy**, drilled in 1980, depth 300 ' with 22' of surface casing

There are a couple of other wells in the Dimock/ Springville area Su#88 and Su-98 they are also completed into the Catskill formation, but are along Route 29 south of Dimock and do not have any analytical results

The **Ex. 6 - Personal Privacy** well #81 **Ex. 6 - Personal Privacy** had the following analytical results: pH 7.9, As- <.005, Al- .18, Cr <.01, Fe .3 Pb, .0051, Mn .56, and Mg 8.6 . All samples are in mg/l except pH

Median results based on 163 samples from the Catskill formation throughout the **entire Susquehanna Basin** was- pH 7.9, As <.005 Al .10, chloride 4, Cr <.01, Fe .07, Pb <.005, Mn .02, Mg 5.5, Na 11.7 all samples are as mg/l except pH

Update 2/2/12: The range of As values went from <.005 to 0.0275, with only 3 samples greater than .005 of the 78 samples within **only Susquehanna county**

The range of Manganese went from 0.01 mg/l to 16. 3 mg/l, but only 10 of the 78 samples were greater than 10 and only 2 of those samples were > 15 mg/l

Karen D. Johnson, Chief
Ground Water & Enforcement Branch

From: Michael Eller/R3/USEPA/US
To: Robert Helverson/R3/USEPA/US@EPA
Cc: KarenD Johnson/R3/USEPA/US@EPA
Date: 01/31/2012 02:43 PM
Subject: Re: USGS article cited in news article

As far as I can tell, the domestic wells in the Dimock area are screened either in alluvium or the Catskill Formation (USGS symbol Dck). Geochemical data for the Catskill bedrock aquifer should be good to establish background. It becomes more complicated if there are multiple chemically distinct water-bearing zones within the Catskill. I'm researching that too.

Mike Eller
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From: Robert Helverson/R3/USEPA/US
To: KarenD Johnson/R3/USEPA/US@EPA, Michael Eller/R3/USEPA/US@EPA
Date: 01/31/2012 01:32 PM
Subject: Re: USGS article cited in news article

Thank you Karen.

Mike,
Any chance you can load that up on the WPD shared drive so I can download it? Sounds like it is just arsenic?

Karen mentioned that you have been putting together a background concentration summary table for Dimock. Is this for the specific formation or just general groundwater numbers? The Dimock wells are apparently from a number of different depths and possibly access different formations. I was planning on placing background data in our health consultation for reference, so would really like to take advantage of all of your research and not duplicate efforts (and be consistent w EPA). When you finish that, could you provide me with the table and references?

Will stop up soon to speak with you, but swamped lately.

Thanks,

Bob
X3139

----- Original Message -----

From: KarenD Johnson
Sent: 01/31/2012 01:16 PM EST
To: Michael Eller
Cc: Robert Helverson
Subject: Re: USGS article cited in news article

Outstanding! Rob Helverson from ATSDR will probably be coming up to pick your brain about what you've learned about background, so they don't have to duplicate the effort!

Karen D. Johnson, Chief

Ground Water & Enforcement Branch

From: Michael Eller/R3/USEPA/US
To: KarenD Johnson/R3/USEPA/US@EPA
Date: 01/31/2012 11:38 AM
Subject: USGS article cited in news article

Hi Karen,

I found the 2006 USGS paper cited by Cabot in yesterday's news article (published in 2007 but given a 2006 date). I've actually read this one already and I have notes on it.

[attachment "Reconnaissance of Arsenic Concentrations in Groundwater from Bedrock and Unconsolidated Aquifers in Eight Northern Tier Counties of Pennsylvania.pdf" deleted by KarenD Johnson/R3/USEPA/US]

Mike Eller

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